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The Impact of Role Models on Health Outcomes for Lesbian, Gay, Bisexual and Transgender Youth

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Abstract

Purpose—There is little research on the impact of role models on health outcomes for Lesbian, Gay, Bisexual, and Transgender (LGBT) youth. This exploratory study describes the presence and availability of LGBT affirming role models and examines the relationship between the accessibility of role models and health outcomes among a community-based sample of LGBT youth.

Methods—A convenience sample of 496 ethnically-diverse, 16–24 year old LGBT youth was recruited to complete a computer-assisted interview using standardized instruments validated with adolescents. The prevalence and characteristics of role models was described. Differences in subgroup distribution were assessed using Pearson Chi-square ($p<0.05$). Differences in health outcomes for those with and without role models and the nature of those role models were determined using analysis of co-variance (ANCOVA) models, with post hoc Bonferroni tests to probe significant global findings.

Results—Sixty-percent of the participants reported having a role model, with younger participants significantly more likely to report having a role model. A majority of the participants reported having inaccessible role models, especially among younger participants. The presence and accessibility of a role model did not have a significant relationship to binge drinking, drug use, or STI diagnoses; however, participants with inaccessible role models showed increased psychological distress versus those with accessible or no role models.

Conclusions—Inaccessible role models may not be sufficient for protecting youth from negative outcomes and formal mechanisms for connecting LGBT youth with caring adults who can serve as role models, such as mentoring programs, are critical.

Keywords

LGBT; Adolescents; Health Risks; Risk Behaviors; Role Models; Mentoring

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Background/Significance

Research consistently shows that Lesbian, Gay, Bisexual, and Transgender (LGBT) youth are at higher risk for depression, anxiety, suicidal ideation, and suicide attempts, than heterosexual youth [1–9]. Research has also shown that LGBT youth are more likely engage in riskier health-related behaviors, including smoking cigarettes [10, 11], using illicit substances [12–14], consuming alcohol [15, 16], and engaging in sexual behaviors putting them at risk for HIV/AIDS and other sexually transmitted infections (STI) [17]. The lack of supportive relationships and role models for LGBT youth likely increases health and behavioral risks [2, 18–20]. Given this, it has been argued that improving access to supportive relationships with peers, family members, or other caring adults could help reduce the impact of stigma and shield LGBT youth from negative health risks [21–23].

Role modeling is an important part of adolescent development and a critical factor in reducing risk and increasing protective factors for healthy development. This is especially true for at-risk youth, who often have fewer resources or less support. In general, research literature shows that role modeling provides a mechanism for fostering resilience, exposing at-risk youth to models of healthy and adaptive behavior, transmitting positive values and beliefs, and generating a positive sense of self-worth and future orientation [11, 20, 24]. Role modeling is associated with important psychological and behavioral benefits, including increases in health and wellness and decreases in psychological distress, academic difficulties, deviant behavior and risk taking [11, 24].

For many adolescents, parents, family members, and other accessible adults serve as role models in their day-to-day lives. Vesely and Colleagues [25] argue that a proximal, non-parental role model, can strengthen an adolescents' capacity to overcome challenges, and protect them from engaging in harmful behaviors. However, the effectiveness of these relationships depends on access to a role model who expresses concern for the youth's well-being and who is trustworthy, respectful, and willing to share information [26]. Therefore, it appears that role modeling is most effective in decreasing negative outcomes when it occurs within strong, personal relationships. For example, research shows that positive role modeling is essential in helping racial minority youth develop a positive self-identity [24] and it is likely that this phenomenon also holds true for LGBT youth.

However, while having gay or gay-supportive role models may be associated with positive health outcomes, research has not explicitly examined the impact of these types of supportive relationships on the health outcomes of LGBT youth. Hypothetically, having accessible role models who are affirming of LGBT sexuality could expose youth to positive norms, perceptions, and behaviors that support them in viewing their sexuality as a unique and positive characteristic [20]. Ultimately, forming a positive attitude regarding sexual identity may inoculate LGBT youth from internalizing negative cultural perceptions, experiences of sexual minority stigma, and overt experiences of discrimination.

However, the limited availability of supportive LGBT adults and allies in the daily lives of LGBT youth may increase isolation and complicate role model selection. LGBT youth may choose less accessible role models such as entertainers or public figures encountered largely through the media [1, 27, 28]. It has been argued in popular discourse and early research that the increased presence of LGBT characters in the media (i.e., Ellen DeGeneres, Chris Colfer/Kurt Hummel on Glee) has had a positive influence on LGBT youth [29]. While these inaccessible role models may be important in the development of the youth's identity as an LGBT individual, they may not provide the explicit protection needed to shield sexual minority youth from everyday discrimination and stress. Some evidence suggests that inaccessible role models are insufficient for decreasing negative outcomes, generating a

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greater sense of worth, or providing the social capital needed to access resources and opportunities [30].

While there is a significant body of research on the impact of role modeling on at-risk youth, very little has focused on LGBT youth and even less has examined the impact of proximal and distal role models on health outcomes [20]. This exploratory study examines the prevalence of role models among a community-based sample of LGBT youth and the association of role model selection and accessibility with demographic characteristics (e.g. gender and race/ethnicity), problem behaviors (i.e., alcohol, drug use), psychological distress (i.e., anxiety and depressive symptoms), and sexual risk-taking consequences (i.e., sexually transmitted infections).

Methods

Participants and Procedures

A convenience sample of 496 ethnically-diverse, 16–24 year old LGBT youth from Chicago participated in the Project Q study. Youth were recruited over 12 months in 2004–2005 from a variety of community-based sources, including agencies serving LGBT youth, postings on high school and college list-serves and related websites, palm cards distributed in gay-identified neighborhoods and participant referrals. No recruitment occurred in venues such as bars, dance clubs or bathhouses. Participants completed a confidential, computer-assisted interview assessing demographics, sexual and substance use behaviors, and psychological measures using standardized instruments validated with adolescent populations. The study was reviewed and approved by the Institutional Review Boards at all participating institutions.

Measures

Having a role model was assessed by a question from previously published literature [24], “Is there a person or individual you really want to be like (this could be someone you know personally, or someone you have read about or seen on TV or in the movies, or that you know in some other way)?” Participants answering affirmatively were then asked an open-ended question, “Who is the person you most want to be like?” Responses were coded: (1) parent, (2) other family member, (3) friend, (4) sibling, (5) other known adult, (6) significant other, (7) singer/musician, (8) actor/entertainer, (9) political/community leader, (10) fictional character, (11) historical figure – to assess the “accessibility” of role models among study participants.

Outcomes of interest were measured using instruments validated in prior studies of adolescents. Frequency of binge drinking in the last year (defined as 5 or more drinks on one occasion; 1=never, 5=everyday), illicit drug use in the last year (summary index of four types of illicit substances, including marijuana, street drugs, over-the-counter medications or prescription medications to get high), and self-reported diagnosis with sexually transmitted infections (summary index of up to nine types of STIs) were measured using the AIDS Risk Behavior Assessment (ARBA) [31]. Anxiety and depressive symptoms were measured with the Brief Symptom Inventory (BSI-18; global severity T score) [32].

Statistical Analysis

We describe the prevalence (overall and by age, gender, and race/ethnicity) and characteristics of role models among LGBT youth as well as differences in problem behavior (i.e., alcohol, drug use), psychological well-being (i.e., depressive symptoms), and physical health (i.e., sexually transmitted infections) as a function of presence and type of role model (i.e., accessible, inaccessible). Differences in subgroup distribution were assessed

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using Pearson Chi-square ($p<0.05$) and differences in health outcomes for those with and without role models (and by role model accessibility) were determined using analysis of co-variance (ANCOVA) models, with post hoc Bonferroni tests to probe significant global findings. Given the association of age and socioeconomic status on both role modeling and our health outcomes among youth in general [24], ANCOVA models were used to control for these factors.

Results

Overall Prevalence of Role Models and Distribution by Age, Gender, and Race/Ethnicity

Ninety percent of participants (N=447 of 496) answered the role model question with a total of 59.7% of the participants (53.8% of the overall sample) reporting that they had a role model. The study sample was diverse by gender (62% male, 29% female, and 9% transgender-identified) and ethnicity/race (34% White, 28% Black, and 26% Latino). Most youth identified as gay or lesbian (70%), with a small percentage bisexual (25%) or unsure/questioning (2%). Mean age was 20 (range=16–24). A total of 64% of participants reported binge drinking in the past year, 61% of participants reported illicit drug use in the past year, approximately 35% met criteria for a mental health disorder (defined as a T score on the Global Severity Index of the BSI >62) [33], and 27% reported ever having been diagnosed with a STI.

Significant differences were found in the presence of role models among younger (ages 16–19) versus older (ages 20–24) participants (66% vs. 55%, respectively; Chi-square [(1, N = 447) = 6.11, $p<0.05$]. In contrast, no significant differences were found in the presence of role models among females (61%), males (60%), and transgender individuals (52%). Likewise, racial/ethnic differences in the presence of role models were not significant (Whites 62%, Blacks 60%, Latinos 57%, and Asian/Pacific Islanders 60%).

Characteristics of Role Models and Relationship to Participant Gender and Race/Ethnicity

A wide variety of role models were listed, including parents (8%), other family members (9%), friends (8%), political/community leaders (6%), other known adults (6%; e.g., teacher), singer/musicians (21%), and actor/entertainers (21%). Frequently cited singer/musicians included Beyonce, Janet Jackson, Shakira, and Queen Latifa; whereas frequently cited actor/entertainers included Oprah, Ellen DeGeneres and Angelina Jolie. While congruence of the participant with their role model by demographic factors (e.g., gender, race/ethnicity) was impossible to assess in most cases (i.e., demographic characteristics of role models were not directly measured), for a subset of participants (n=191), the gender of role models was discernable because of their relationship to the participant (i.e., mother/father) or their status as a public figure. Significant differences were noted in the gender congruence of participants and their role models [Chi-square (1, N = 191) = 38.72, $p<0.001$], with more congruence among females (90%) compared to males (58%).

We further categorized role models as accessible (e.g. family members, parents, friends, etc.) or inaccessible (e.g. singer/musician, actor/entertainer, etc). Among those reporting a role model, a third (33%) had an accessible role model while the majority (60%) reported an inaccessible role model (7% indiscernible). We compared subgroup differences among those without a role model, those with an accessible role model, and those with an inaccessible role model. Significant differences were found by age [Chi-square (2, N = 441) = 7.8, $p<0.05$]. Participants' aged16–19 had the highest prevalence of inaccessible role models (46% vs. older participants 34%), while older participants aged 20–24 were more likely to have no role model (46% vs. 34% among younger teens). Both age groups reported a 20% prevalence of accessible role models. Transgender participants were most likely to have no

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role model (49% vs. females 39% and males 41%), whereas females were most likely to have accessible role models (23% vs. males 19% and transgender youth 12%). However, these differences were not statistically significant. In terms of race/ethnicity, White youth had the highest prevalence of accessible role models (24% vs. African American 16% and Latino 18%), while Blacks had the highest prevalence of inaccessible role models (43%, vs. White 37%, and Latinos 39%); these difference were also not statistically significant.

The Relationship of Role Modeling to Health Outcomes

We examined each health outcome to determine if 1) mean scores varied significantly as a function of the role modeling and 2) if mean scores varied significantly as a function of the accessibility of the role model (see Table 1). We found that the presence of a role model (vs. none) did not have a significant relationship to binge drinking [F (1, 433)= 1.11, n.s], drug use [F (1, 433) = 0.97, n.s.], or STI diagnosis [F = .01, n.s.), but did have a significant relationship to psychological distress [F (1, 433)=13.20, p<.01]. The findings regarding psychological distress were contrary to those expected; youth with role models had higher levels of psychological distress relative to those without role models.

Regarding the accessibility of role models, no significant differences were detected for binge drinking [F (1, 432) = 1.24, n.s.), drug use [F (1,432) = 1.06, n.s.], or STI diagnosis [F (1, 432) = .06, n.s.]; however, significant differences again were found for psychological distress [F (1, 432) = 9.51, df =2, p<.01]. Post hoc Bonferroni tests showed significantly higher mean psychological distress scores for individuals with inaccessible role models versus either those without role models (p<.01) or those with accessible role model (p<.05).

Discussion

This exploratory study examined the prevalence of role models and illuminated a number of factors related to the function and characteristics of role models among LGBT youth. More than half of the sample identified role models in their lives; with only 16% being parents or other family members and 60% being figures largely inaccessible in these youths' daily lives. These results differ in many ways from the results of previous research on adolescent role models, which indicate that the majority of youth report having a role model, (96% in the case of a recent study with African American urban youth), [34] and frequently identify parents and other proximal adults as role models [11, 24]. Younger participants were more likely to report a role model compared to older participants; consistent with developmental expectations. Role model prevalence did not differ by participants' gender or race/ethnicity, which is supported by LGBT youth-specific research [20]. However, this contradicts general adolescent research by Yancey and colleagues [24] who found that White youth were more likely to have a role model than Black youth. Furthermore, females tended to select same-gender role models more often than males and the majority of White and Black participants selected role models who matched their race/ethnicity, though, the same was not found among Latino participants.

Substance use and previous STI diagnosis were not significantly related to the presence of role models, regardless of their accessibility. We suspect these null findings may be due to the more proximal influence of peers on substance use and sexual risk behavior (in contrast to that of role models). However, contrary to expectations, youth who reported having role models had significantly higher psychological distress in comparison to those without role models. Analysis by accessibility indicates that symptoms were highest among those with inaccessible role models in comparison to those youth reporting accessible role models or no role models. This result mirrors findings that showed having access to caring adults and accessible role models was protective against mental health problems, such as suicidal ideation and depression. [35, 20]

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The fact that both this study and the work done by Grossman and D'Aguelli [20] indicate that LGBT youth with inaccessible role models show increased psychological distress is troubling. Having inaccessible role models may be associated with negative mental health outcomes for a number of reasons, including the fact that these types of role models cannot mentor or assist the youth in navigating difficult life choices or provide advice, comfort, or a safe space. Given this, when LGBT youth can only identify non-proximal role models in their lives, the inaccessible role model may become a stark reminder that the youth does not have anyone in their lives that can understand them or accept them for who they are, exacerbating feelings of isolation and loneliness. Conversely, the power of proximal role models lies in the opportunity for youth to leverage these relationships into mentorship, allowing them to reap psychosocial benefits of having a supportive ally.

There are a number of barriers to LGBT youth finding accessible gay or gay-affirming adult role models. These barriers include fears about coming out or being “outed”, sexual minority stigma and discrimination from family, schools, peers, and societal fears and myths about the dangers of encouraging relationships between older and younger LGBT individuals. These challenges may be especially true for LGBT youth under the age of 20, who are more likely to be in high school and living at home, where choosing inaccessible celebrity role models may be easier than forming direct relationships with individuals who might reject them because of their LGBT identity.

The findings that LGBT youth between the ages of 16–19 were more likely to report inaccessible role models than youth aged 20–24 suggest there may be a unique dynamic at play for younger versus older LGBT adolescents. It may be that younger LGBT youth are more isolated, less likely to be “out”, and less likely to have access to LGBT or LGBT-friendly individuals, leaving media figures as the only role models with whom to identify. Conversely, older LGBT youth may be more likely to be “out” about their sexual identity and have larger, more LGBT-supportive social networks and friends because they've moved away from home, entered college, and/or moved into the work force. Therefore, the need for supportive role models is lessened and, when they do have role models, they are more likely to choose someone with whom they have a direct relationship. Under these conditions, younger LGBT individuals appear to rely more on non-proximal and inaccessible role models who are unable to provide any type of direct protective role for youth.

Conclusion

A number of critical clinical implications arise from our study results. There is a dearth of research on role models and LGBT youth and it is not currently possible to determine whether there would be more benefits from LGBT versus LGBT-friendly role models. However, given that LGBT individuals make up approximately 3.5% to 8.2% of the U.S. population [36], it may be more practical (and to some extent theoretically beneficial) for LGBT youth to find LGBT-friendly adults in whom they can confide. Given the barriers LGBT youth may encounter in finding allies, it is essential that programs be developed to help LGBT youth find caring and supportive adults. This may be accomplished through comprehensive development of Gay/Straight alliances in schools, community organizations that target LGBT adolescents or media campaigns that appeal directly to parents, teachers, and others to reach out and make themselves available to LGBT youth, such as the Trevor project and the “It Gets Better” campaign. The use of web-based technology (i.e., Facebook, Skype, etc.) may also be an important tool for accessing LGBT youth who feel isolated and are unable to access role models in their communities. While these remote alternatives may be less useful than in-person relationships, they may serve a supportive function in the absence of other options.

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Another important avenue to consider pursuing is the development of formal mentorship programs for LGBT youth. Research has shown that mentoring programs and relationships are most effective for at-risk youth who are disadvantaged and lack access to supportive resources and opportunities [37]. For LGBT youth, formal mentorship programs could be used to bring together individuals who would not naturally meet to create a foundation from which role modeling could develop. DuBois and Silverthorn [38] make an explicit connection between mentorship and role modeling, arguing that developing mentorship relationships and programs with people outside the youth's immediate family are useful for two primary reasons. First, mentoring relationships external to the family system circumvent factors that may increase stress for both the mentor and the mentee, such as the adolescents' sexual identity. Second, external mentoring relationships can help build social capital and create opportunities to access new social networks, exposing youth to new strategies for addressing issues of concern.

While these findings highlight important potential points of intervention, there were limitations to this study. First, these data are cross-sectional; therefore, causality cannot be inferred with regard to the significant association between the type of role model and psychological distress. Nevertheless, the high prevalence of inaccessible role models among LGBT youth and the significant relationship to distress is cause for concern. Future studies should disentangle the temporal ordering to better target potential interventions. In addition, this was a convenience sample with an overrepresentation of male youth, in one city (Chicago), thus these findings may not generalize to other LGBT youth. However, we found that baseline rates of substance use, STIs and psychological distress were comparable to those found in other samples of LGBT youth [39]. While our measure of the presence of role models has been used in a prior study of youth, the use of a single question, particularly one that does not specify the sexual orientation of the role model, may limit our ability to capture all potential role models that youth may have. It may also have been useful to collect data regarding how “out” the participant was and with whom they had discussed their sexuality to explore potential issues of access to role models. Finally, the research presented here is not meant to discount the need for celebrity role models. It is important that more people in society gain exposure to the diversity of what it means to be a sexual minority. However, inaccessible role models, such as celebrities, may not be sufficient for protecting LGBT youth from risk behaviors or suffering negative health outcomes. For this, LGBT youth may need the opportunity to build direct relationships with adults they look up to and who are willing to help them understand and overcome challenges in their daily lives.

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References

1. Almeida J, et al. Emotional distress among LGBT youth: the influence of perceived discrimination based on sexual orientation. J Youth Adolesc. 2009; 38(7):1001–14. [PubMed: 19636742]
2. Birkett M, Espelage DL, Koenig B. LGB and questioning students in schools: the moderating effects of homophobic bullying and school climate on negative outcomes. J Youth Adolesc. 2009; 38(7):989–1000. [PubMed: 19636741]
3. Bontempo DE, D'Augelli AR. Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths' health risk behavior. Journal of Adolescent Health. 2002; 30(5):364–74. [PubMed: 11996785]
4. Garofalo R, et al. Sexual orientation and risk of suicide attempts among a representative sample of youth. Archives of Pediatrics and Adolescent Medicine. 1999; 153(5):487–93. [PubMed: 10323629]

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5. Jiang Y, Perry DK, Hesser JE. Adolescent suicide and health risk behaviors: Rhode Island's 2007 Youth Risk Behavior Survey. Am J Prev Med. 2010; 38(5):551–5. [PubMed: 20409502]
6. Saewyc EM. Contested conclusions: claims that can (and cannot) be made from the current research on gay, lesbian, and bisexual teen suicide attempts. J LGBT Health Res. 2007; 3(1):79–87. [PubMed: 18029318]
7. Cochran SD, Mays VM. Lifetime prevalence of suicide symptoms and affective disorders among men reporting same-sex sexual partners: results from NHANES III. American Journal of Public Health. 2000; 90(4):573–8. [PubMed: 10754972]
8. Kisch J, Leino EV, Silverman MM. Aspects of suicidal behavior, depression, and treatment in college students: results from the spring 2000 national college health assessment survey. Suicide and Life-Threatening Behavior. 2005; 35(1):3–13. [PubMed: 15843320]
9. Russell ST, Joyner K. Adolescent sexual orientation and suicide risk: evidence from a national study. American Journal of Public Health. 2001; 91(8):1276–81. [PubMed: 11499118]
10. Easton A, et al. Adolescent same-sex and both-sex romantic attractions and relationships: implications for smoking. American Journal of Public Health. 2008; 98(3):462–7. [PubMed: 18235075]
11. Bryant AL, Zimmerman MA. Role models and psychosocial outcomes among African American adolescents. Journal of Adolescent Research. 2003; 18(1):36–67.
12. Hatzenbuehler ML, Corbin WR, Fromme K. Trajectories and determinants of alcohol use among LGB young adults and their heterosexual peers: results from a prospective study. Developmental Psychology. 2008; 44(1):81–90. [PubMed: 18194007]
13. Corliss HL, et al. Sexual orientation and drug use in a longitudinal cohort study of U.S. adolescents. Addict Behav. 2010; 35(5):517–21. [PubMed: 20061091]
14. Marshal MP, et al. Individual trajectories of substance use in lesbian, gay and bisexual youth and heterosexual youth. Addiction. 2009; 104(6):974–81. [PubMed: 19344440]
15. Garofalo R, et al. Overlooked, misunderstood and at-risk: exploring the lives and HIV risk of ethnic minority male-to-female transgender youth. Journal of Adolescent Health. 2006; 38(3):230–6. [PubMed: 16488820]
16. Wong CF, Kipke MD, Weiss G. Risk factors for alcohol use, frequent use, and binge drinking among young men who have sex with men. Addictive Behaviors. 2008; 33(8):1012–20. [PubMed: 18495364]
17. CDC. HIV/AIDS among Youth. Electronic Version. CDC; August. 2008
18. Huebner DM, Rebchook GM, Kegeles SM. Experiences of harassment, discrimination, and physical violence among young gay and bisexual men. American Journal of Public Health. 2004; 94(7):1200–3. [PubMed: 15226143]
19. Safren SA, Heimberg RG. Depression, hopelessness, suicidality, and related factors in sexual minority and heterosexual adolescents. Journal of Consulting and Clinical Psychology. 1999; 67(6):859–66. [PubMed: 10596508]
20. Grossman, AH.; D'Aguelli, AR. The socialization of lesbian, gay, and bisexual youth: Celebrity and personally known role models. In: Kennedy, E.; Thornton, A., editors. Leisure, media and visual culture: Representations and Contestations. LSA Publications: Eastbourne; UK: 2004. p. 83-105.
21. Rosario M, Schrimshaw EW, Hunter J. Cigarette Smoking as a Coping Strategy: Negative Implications for Subsequent Psychological Distress Among Lesbian, Gay, and Bisexual Youths. Journal of Pediatric Psychology. 2010
22. D'Augelli AR, et al. Predicting the suicide attempts of lesbian, gay, and bisexual youth. Suicide and Life-Threatening Behavior. 2005; 35(6):646–60. [PubMed: 16552980]
23. Ryan C, et al. Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. Pediatrics. 2009; 123(1):346–52. [PubMed: 19117902]
24. Yancey AK, Siegel JM, McDaniel KL. Role models, ethnic identity, and health-risk behaviors in urban adolescents. Arch Pediatr Adolesc Med. 2002; 156:55–61. [PubMed: 11772191]
25. Vesely SK, et al. The potential protective effects of youth assets from adolescent sexual risk behaviors. Journal of Adolescent Health. 2003; 34:356–365. [PubMed: 15093789]

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26. Beier SR, Rosenfeld WD, Spitalny KC, Zansky SM, Bontempo AN. The potential role of an adult mentor in influencing high-risk behaviors in adolescents. Arch Pediatr Adolesc Med. 2000; 154(4):327–331. [PubMed: 10768667]
27. Savin-Williams RC. Verbal and Physical Abuse as Stressors in the Lives of Lesbian, Gay Male, and Bisexual Youths: Associations With School Problems, Running Away, Substance Abuse, Prostitution, and Suicide. Journal of Consulting and Clinical Psychology. 1994; 62(2):261–269. [PubMed: 8201062]
28. Wyss SE. This was my hell: the violence experienced by gender non-conforming youth in US high schools. International Journal of Qualitative Studies in Education. 2004; 17:709–730.
29. Avery A, et al. America's Changing Attitudes toward Homosexuality, Civil Unions, and Same-Gender Marriage: 1977–2004. Social Work. 2007; 52:71–79. [PubMed: 17388085]
30. Sampson, RJ. The embeddedness of child and adolescent development: A community-level perspective on urban violence. In: McCord, J., editor. Violence and childhood in the inner city. Cambridge University Press: Cambridge; England: 1997. p. 31-77.
31. Donenberg GR, et al. Understanding AIDS-Risk Behavior Among Adolescents in Psychiatric Care: Links to Psychopathology and Peer Relationships. Journal of the American Academy of Child & Adolescent Psychiatry. 2001; 40(6):642–653. [PubMed: 11392341]
32. Derogatis LR, Melisaratos N. The Brief Symptom Inventory: an introductory report. Psychological Medicine. 1983; 13(03):595–605. [PubMed: 6622612]
33. Derogatis LR. BSI 18: Administration, Scoring and Procedures Manual. Minneapolis, MN: National Computer Systems. 2000
34. Hurd N, Zimmerman M, Xue Y. Negative Adult Influences and the Protective Effects of Role Models: A Study with Urban Adolescents. Journal of Youth and Adolescence. 2009; 38(6):777–789. [PubMed: 19636780]
35. Eisenberg ME, Resnick MD. Suicidality among gay, lesbian, and besexual youth: The role of protective factors. Journal of Adolescent Health. 2006; 39:662–668. [PubMed: 17046502]
36. Gates, GJ. How many people are lesbian, gay, bisexual, and transgender?. Williams Institute, University of California School of Law; Los Angeles, CA: 2011.
37. DuBois DL, Holloway BE, Valentine JC. Effectiveness of mentoring programs for youth: A meta-analytic review. American Journal of Community Psychology. 2002; 30(2):157–197. [PubMed: 12002242]
38. DuBois DL, Silverthorn N. Charateristics of natural mentoring relationships and adolescent adjustment: Evidence from a national study. The Journal of Primary Prevention. 2005; 26(2):69–92. [PubMed: 15977043]
39. IOM. Chapter 4: Childhood/Adolescence in The health of lesbian, gay, bisexual, and transgender people. Institute of Medicine; Washington, DC: 2011.

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Table 1

Analysis of Covariance for Health Outcomes as a Function of Role Model Selection and Accessibility among LGBT Youth (N= 436 of 447)[a]

	Estimated Marginal Mean (SD)			
	Binge Drinking	**Drug Use**	**Psychological Distress**	**STIs**
Role model				
No	2.22 (0.08)	0.63 (0.10)	56.4 (0.78)	0.49 (0.07)
Yes	2.33 (0.07)	0.76 (0.08)	60.2 (0.65)	0.49 (0.06)
F(df)	1.11 (1)	0.97 (1)	13.20 (1)**	0.01 (1)
Accessibility				
No role model	2.22 (0.08)	0.63 (0.10)	56.4 (0.78)**	0.49 (0.07)
Accessible	2.22 (0.12)	0.63 (0.14)	58.0 (1.13)*	0.46 (0.10)
Inaccessible (ref)	2.39 (0.09)	0.82 (0.09)	61.2 (0.79)	0.50 (0.07)
F(df)	1.24 (2)	1.06 (2)	9.51(2)**	0.06 (2)

[a] N = 436 of 447 due to missing cases on drinking and drug use outcomes

* $p<.05$

** $p<.01$